

Appl. No. 10/045,771
Reply to Office Action of November 25, 2003

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A device for side impact detection for a motor vehicle, comprising:
 - a reflector situated in a side section of the motor vehicle;
 - a stiffening pipe connected to the reflector, the stiffening pipe being situated in a the side section of the motor vehicle;
 - at least one sensor situated in the side section of the motor vehicle for determining a side section deformation, the at least one sensor including a distance sensor for measuring a distance to the reflector; and
 - a control unit for evaluating sensor signals from the at least one sensor, the control unit detecting a side impact as a function of the distance.
2. (Original) The device according to claim 1, wherein the distance sensor is an optical sensor.
3. (Previously Presented) The device according to claim 1, wherein a surface of the stiffening pipe is the reflector.
4. (Previously Presented) The device according to claim 1, wherein the stiffening pipe is connected to a metal plate as the reflector.
5. (Previously Presented) A device for side impact detection for a motor vehicle, comprising:
 - a reflector;
 - a stiffening pipe connected to the reflector, the stiffening pipe being situated in a side section of the motor vehicle;
 - at least one sensor situated in the side section of the motor vehicle for determining a side section deformation, the at least one sensor including a distance sensor for measuring a distance to the reflector; and

a control unit for evaluating sensor signals from the at least one sensor, the control unit detecting a side impact as a function of the distance;

wherein, after a start of operation of the device, the at least one sensor carries out an initial measuring procedure to adjust a transmitting power.

6. (Original) The device according to claim 5, further comprising a control circuit, the at least one sensor being connected to the control circuit in order to adjust the transmitting power during operation.

7. (Previously Presented) A device for side impact detection for a motor vehicle, comprising:

a reflector;

a stiffening pipe connected to the reflector, the stiffening pipe being situated in a side section of the motor vehicle;

at least one sensor situated in the side section of the motor vehicle for determining a side section deformation, the at least one sensor including a distance sensor for measuring a distance to the reflector;

a control unit for evaluating sensor signals from the at least one sensor, the control unit detecting a side impact as a function of the distance; and

a plausibility sensor situated in the side section.

8. (Previously Presented) The device of claim 7, wherein the plausibility sensor includes an accelerometer.

9. (Currently Amended) A [[The]] device of claim 1 for side impact detection for a motor vehicle, comprising:

a reflector;

a stiffening pipe connected to the reflector, the stiffening pipe being situated in a side section of the motor vehicle;

at least one sensor situated in the side section of the motor vehicle for determining a side section deformation, the at least one sensor including a distance sensor for measuring a distance to the reflector; and

a control unit for evaluating sensor signals from the at least one sensor, the control unit detecting a side impact as a function of the distance;

wherein the at least one sensor is protected from interference by outside light.

10. (Previously Presented) The device of claim 1, wherein the distance decreases in response to the side impact.